

## UPDATED CHECKLIST OF THE FREE-LIVING MARINE COPEPODA (CRUSTACEA) OF MEXICO

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### RESUMEN

La fauna de copépodos de los mares mexicanos ha sido estudiada desde hace décadas. Sin embargo, el número de especies presentes en México no se ha establecido y sólo existen listas faunísticas restringidas a ciertas zonas. En este trabajo se presenta una lista de las especies de copépodos marinos registradas en las aguas mexicanas del Pacífico y del Atlántico. El número total de especies (479) representa principalmente la riqueza específica de los ambientes de la columna de agua, con los Calanoida como el grupo más diverso. El conocimiento de los Harpacticoida, un grupo muy diverso en el meiobentos, es aún escaso en México, por lo que debe ser incrementado. Se presenta también la literatura taxonómica y de distribución de copépodos marinos para México.

Palabras clave: copépodos, México, lista de especies.

### ABSTRACT

The marine copepod fauna of the Mexican seas has been studied for decades. However, the number of species occurring in these waters has not been estimated, the only faunistic checklists being from restricted areas. In this paper, we present an updated and revised checklist of the marine copepods recorded in Mexican territorial waters of the Pacific and the Atlantic. The total number of species (479) represent mainly collections from the water column environments, with the pelagic group Calanoida being the most diverse. Knowledge of the very diverse meiobenthic copepods belonging to the Harpacticoida is still limited in Mexico, and should be improved. A list of references on the taxonomy and distribution of Mexican marine copepods is also presented here.

Key words: copepods, Mexico, checklist.

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## INTRODUCTION

The free-living marine copepods of the Mexican seas have been surveyed for decades (Campos & Suárez, 1994; Suárez, 1996); however, only a few of these studies have covered a wide area, either in the Pacific or the Atlantic waters of Mexico. Therefore, previous faunistic checklists of the Mexican copepod fauna refer to restricted areas, such as the Gulf of California (Brinton *et al.*, 1986), the Caribbean Sea (Reid, 1990) or the southern Gulf of Mexico (Suárez, 1992a). There are no current estimations of the diversity of this group in Mexico. In this work, an updated and revised checklist of the marine copepods recorded from Mexico is here presented along with the most relevant literature for the Mexican fauna. The list includes copepods from oceanic, coastal, and estuarine environments. The Mexican seas have been divided into four large areas: Gulf of Mexico and Caribbean Sea in the Atlantic, and Mexican Pacific and Gulf of California, in the Pacific.

Preference was given to the literature with species lists and taxonomic aspects of different taxa. General, comprehensive works or revisions of selected taxa (Nishida, 1985; Walter, 1989; Markhaseva, 1996; Razouls, 1996) were also consulted.

The analysis of published and unpublished (thesis, project reports) information on the free-living marine copepods from Mexican waters of the Atlantic and the Pacific oceans yields a total of 478 species belonging to 5 orders, 54 families, and 135 genera. Out of the total number of species, 325 (ca. 68 %) belong to the order Calanoida, 62 (12.9 %) to the Poecilostomatoida, 20 (4.2 %) to the Cyclopoida, 36 (7.3 %) to the Harpacticoida, 24 (5 %) to the Siphonostomatoida, and the remaining 12 (2.7 %) to the Monstrilloida, a group in which only the adult stage is free-living.

Down to the family and genus level, the order Calanoida is clearly the most diverse group, with 26 families and 78 genera present in Mexican waters, followed by Harpacticoida (17 and 30) and Poecilostomatoida (6 and 12). Within the calanoids, the family Aetideidae is the most speciose, with 43 species. The families Euchaetidae (37 species), Pontellidae (41), and Scolecithricidae (30) are also well represented in Mexico. Within the Poecilostomatoida, the two most species-rich families in Mexico are Corycaeidae (with 27 species) and Sapphirinidae (with 17).

Most of the species included in this checklist (89%) are records from water column environments (epi- and mesopelagic); a relatively low number of epibenthic or benthic forms is also included (58 species). However, according to Marcotte (1986), meiobenthic harpacticoids are quite diverse, even more than calanoids. Surveys in the benthic environments of the Mexican Seas are expected to yield a significant number of new records of harpacticoid copepods. For instance, Reid (1990) listed 211 harpacticoid copepod species from the Caribbean and Central America, and only a few of these have been recorded in Mexico. The checklist is also expected to grow steadily as deeper plankton samplings are carried out, as the knowledge on the copepod fauna below 300-400 m in the Mexican seas is still quite limited.

Regarding the different areas analysed, 269 copepod species have been recorded in the Gulf of Mexico, 201 in the Mexican Caribbean, 154 in the Gulf of California and 236 in the Mexican Tropical Pacific area. Of the total number of species, 82 have been recorded only in the Gulf of Mexico, 31 in the Mexican Caribbean area, 30 in the Gulf of California, and 93 in the Tropical Pacific; the reason for this figure in the tropical Pacific is the addition of the rich copepod fauna associated to hydrothermal vents.

Reid (1990) listed a total of 430 species of free-living marine copepods for Central America, Mexico and the entire Caribbean Sea. However, only 167 of these were recorded in Mexico at that time. Hernández-Trujillo (1996) estimated as 150 the number of species dwelling in the Gulf of Mexico and Caribbean Sea, and as 293 the number of species reported from the Pacific area, with 89 species common to both areas. The total number of marine copepod species estimated by Hernández-Trujillo for Mexico (354) is ca. 26 % lower than the figure presented in this report. Most differences may result in our inclusion of recent works on harpacticoids, monstrilloids, and on deep-water copepods.

### List of the marine free-living and semiparasitic copepods collected in Mexican waters, using Huys & Boxshall's (1991) taxonomic scheme

I: Gulf of Mexico; II: Caribbean Sea; III: Tropical Pacific and Californian coast; IV: Gulf of California.

**Subclass Copepoda** Milne-Edwards, 1840

**Infraclass Neocopepoda** Huys & Boxshall, 1991

**Superorder Gymnoplea** Giesbrecht, 1882

**Order Calanoida** G.O. Sars, 1903

**Family Acartiidae** Sars, 1900

*Acartia bacorehensis* Zamora-Sánchez & Gómez-Aguirre, 1985. IV

*A. californiensis* Trinast, 1976. III

*A. clausi* Giesbrecht, 1892. III

*A. danae* Giesbrecht, 1889 I, II, III, IV

*A. lilljeborgii* Giesbrecht, 1889. I, II, III, IV

*A. longiremisi* (Lilljeborg, 1853). IV

*A. negligens* Dana, 1852. II, III, IV

*A. spinata* Esterly, 1911. I, II

*A. tonsa* Dana, 1849. I, II, III, IV

**Family Aetideidae** Giesbrecht, 1892

*Aetideopsis multiserrata* (Wolfenden, 1904) III, IV

*Aetideus acutus* Farran, 1929. I, II, III, IV

*A. armatus* Boeck, 1872. I, III, IV

*A. bradyi* A. Scott, 1909. III, IV

*A. giesbrechti* (Cleve, 1904). I, II, III

*A. mexicanus* Park, 1974. I

*A. truncatus* Bradford, 1971. III, IV

*Bradydium arnoldi* Fleminger, 1957. I

*Chiridiella bispinosa* Park, 1970. I

*Ch. chainae* Grice, 1969. II

*Ch. macrodactyla* Sars, 1907. II

*Chiridius gracilis* Farran, 1908. I

*Ch. mexicanus* Park, 1975. I

*Ch. molestus* Tanaka, 1957. I

*Ch. poppei* Giesbrecht, 1892. I

*Chirundina streetsii* Giesbrecht, 1895 I, III

*Euchirella amoena* Giesbrecht, 1888. I, II, III

*E. bella* Giesbrecht, 1888. III

*E. bitumida* With, 1915. I

*E. curticauda* Giesbrecht, 1888. I, II, III

*E. maxima* Wolfenden, 1905. I

*E. messinensis* (Claus, 1863). I, II

*E. pseudotruncata* Park, 1975. I

*E. pulchra* Lubbock, 1856. I, II

- E. rostrata* (Claus, 1866). I  
*E. splendens* Vervoort, 1963. I  
*E. truncata* Esterly, 1911. I  
*E. venusta* Giesbrecht, 1888. I, II, III, IV  
*Gaetanus armiger* Giesbrecht, 1888. III  
*G. brachyurus* Sars, 1907. I  
*G. brevicornis* Esterly, 1906. III  
*G. kruppii* Giesbrecht, 1888. I  
*G. latifrons* Sars, 1925. I, II  
*G. miles* Giesbrecht, 1888. I, II, III  
*G. minor* Farran, 1905. I, II  
*G. minutus* Sars, 1907. I, II  
*G. pileatus* Farran, 1903. I, II  
*G. pungens* (Giesbrecht, 1895). III  
*G. robustus* (Sars, 1905). III  
*G. tenuispinus* (Sars, 1900). I, II  
*Undeuchaeta intermedia* Scott, 1909. III  
*U. major* Giesbrecht, 1888. I, II  
*U. plumosa* (Lubbock, 1856). I, II

#### Family Arietellidae Sars, 1903

- Arietellus armatus* Wolfenden, 1911. I, II  
*A. giesbrechti* Sars, 1905. I, II  
*A. pacificus* Esterly, 1913. III  
*A. plumifer* Sars, 1905. I, II  
*A. setosus* Giesbrecht, 1892. II, III  
*Paraugaptilus buchani* Wolfenden, 1904. I, III  
*Phyllopus bidentatus* Brady, 1883. I, II, IV

#### Family Augaptilidae Sars, 1905

- Augaptilus californicus* Esterly, 1913. III  
*A. depressus* Esterly, 1913. III  
*A. megalurus* Giesbrecht, 1889. I  
*A. romanus* Esterly, 1913. III  
*A. longicaudatus* (Claus, 1863). I, II, IV  
*Euaugaptilus filigerus* (Claus, 1863). I, II  
*E. gracilis* (Sars, 1905). I  
*E. hecticus* (Giesbrecht, 1889). I, II  
*E. laticeps* (Sars, 1905). I  
*E. nodifrons* (Sars, 1905). I  
*Centraugaptilus ratrayi* (Scott, 1894). I  
*Haloptilus acutifrons* (Giesbrecht, 1892). I, II, III, IV  
*H. chierchiae* (Giesbrecht, 1889). IV  
*H. fertilis* (Giesbrecht, 1892). I, II, III  
*H. furcatus* Sars, 1920. I

- H. longicornis* (Claus, 1863). I, II, III, IV  
*H. mucronatus* (Claus, 1863). I, II  
*H. ornatus* (Giesbrecht, 1892). I, II, III, IV  
*H. oxycephalus* (Giesbrecht, 1889). I, II, III  
*H. spiniceps* (Giesbrecht, 1892). I, II  
*Heteroptilus attenuatus* (Sars, 1905). II  
*Pachyptilus eurygnathus* Sars, 1920. I

#### Family Calanidae Dana, 1849

- Calanus minor* (Claus, 1863). I, II, III, IV  
*C. pacificus* Brodsky, 1948. III, IV  
*Canthocalanus pauper* Giesbrecht, 1888. III  
*Cosmocalanus darwini* (Lubbock, 1860). I, III, IV  
*Mesocalanus tenuicornis* (Dana, 1849). I, II, III, IV  
*M. lighti* (Bowman, 1955). III  
*Neocalanus gracilis* (Dana, 1849). I, II, III, IV  
*N. cristatus* (Mori, 1937). III  
*N. robustior* (Giesbrecht, 1888). I, II, III, IV  
*Undinula vulgaris* (Dana, 1852). I, II, III, IV

#### Family Calocalanidae Bernard, 1958

- Calocalanus contractus* Farran, 1926. I, II, III, IV  
*C. gracilis* Tanaka, 1956. I  
*C. pavo* (Dana, 1852). I, II, III, IV  
*C. pavoninus* Farran, 1936. I, IV  
*C. plumulosus* (Claus, 1863). I, II, III, IV  
*C. styliremis* Giesbrecht, 1888. I, II, III, IV  
*Mecynocera clausi* Thompson, 1888. I, II, III

#### Family Candaciidae Giesbrecht, 1892

- Candacia aethiopica* Dana, 1849. I, III, IV  
*C. bipinnata* (Giesbrecht, 1889). I, III, IV  
*C. bradyi* Scott, 1902. III  
*C. catula* (Giesbrecht, 1889). III, IV  
*C. columbiae* Campbell, 1929. III  
*C. curta* (Dana, 1849). I, III, IV  
*C. discaudata* Scott, 1909. III  
*C. longimana* (Claus, 1863). I, II  
*C. pachydactyla* (Dana, 1852). I, II, III, IV  
*C. pannelongimana* Fleminger & Bowman, 1956. I

*C. pectinata* Giesbrecht, 1892. III  
*C. pofi* Grice & Jones, 1960. III, IV  
*C. truncata* (Dana, 1849). III, IV  
*C. varicans* (Giesbrecht, 1892). I, II, III, IV  
*Paracandacia bispinosa* (Claus, 1863). I, II  
*P. simplex* (Giesbrecht, 1889). I, II

#### Family Centropagidae Giesbrecht, 1892

*Centropages abdominalis* Sato, 1913. III  
*C. bradyi* Wheeler, 1901. III  
*C. calaninus* (Dana, 1849). III  
*C. caribbeanensis* Park, 1970. I, II  
*C. elongatus* Giesbrecht, 1896. III  
*C. furcatus* (Dana, 1849). III, IV  
*C. gracilis* (Dana, 1849). III, IV  
*C. hamatus* (Lilljeborg, 1853). I, II  
*C. longicornis* Dana, 1849. III, IV  
*C. typicus* Krøyer, 1849. I  
*C. velificatus* (Oliveira, 1947) I, II  
*C. violaceus* (Claus, 1863). I, II

#### Family Clausocalanidae Giesbrecht, 1892

*Clausocalanus arcuicornis* (Dana, 1849). I, II, III  
*C. farrani* Sewell, 1929. III, IV  
*C. furcatus* (Brady, 1883). I, II, III, IV  
*C. jobei* Frost & Fleminger, 1968. III, IV  
*C. mastigophorus* (Claus, 1866). IV  
*C. parapergens* Frost & Fleminger, 1968. IV  
*C. paululus* Farran, 1926. I  
*Clenocalanus longicornis* Mori, 1937. III  
*C. vanus* Giesbrecht, 1888. I, III, IV

#### Family Eucalanidae Giesbrecht, 1892

*Eucalanus californicus* Johnson, 1938. III  
*E. elongatus* (Dana, 1849). I, II, III, IV  
*E. hyalinus* (Claus, 1866). III  
*Pareucalanus sewelli* (Fleminger, 1973). I, II, III, IV  
*Rhincalanus cornutus* (Dana, 1849). I, II, III, IV  
*R. nasutus* Giesbrecht, 1888. I, II, III, IV  
*Subeucalanus crassus* (Giesbrecht, 1888). I, II, III  
*S. inermis* (Giesbrecht, 1892). III, IV  
*S. monachus* (Giesbrecht, 1888). I, II  
*S. mucronatus* (Giesbrecht, 1888). I, II

*S. pileatus* (Giesbrecht, 1888). I, II, III  
*S. subcrassus* (Giesbrecht, 1888). I, II, III, IV  
*S. subtenius* (Giesbrecht, 1888). I, II, III, IV

#### Family Euchaetidae Giesbrecht, 1892

*Euchaeta acuta* Giesbrecht, 1892. I, II, III, IV  
*E. indica* Wolfenden, 1905. IV  
*E. longicornis* (Giesbrecht, 1888). III, IV  
*E. marina* (Prestandrea, 1833). I, II, III  
*E. marinella* Bradford, 1974. III  
*E. media* Giesbrecht, 1888. I, II, III, IV  
*E. paraconcinna* Fleminger, 1957. I  
*E. plana* Mori, 1937. III?  
*E. pseudotonsa* Fontaine, 1967. I  
*E. pubera* Sars, 1907. I  
*E. rimana* Bradford, 1974. IV  
*E. spinosa* Giesbrecht, 1892. I, II, IV  
*Paraeuchaeta aequatorialis* (Tanaka, 1958).

#### III

*P. alaminae* (Park, 1975). I  
*P. barbata* (Brady, 1883). I, II  
*P. bisinuata* Sars, 1907. I, III  
*P. calva* (Tanaka, 1958). I, II  
*P. californica* (Esterly, 1906). III, IV  
*P. confusa* (Tanaka, 1958). II  
*P. copleyae* Park, 1994. III, IV  
*P. cosmosa* (Tanaka, 1958). I, II  
*P. gracilicauda* (Scott, 1909)  
*P. gracilis* (Sars, 1905). I, II  
*P. grandiremis* (Giesbrecht, 1888). III, IV  
*P. hansenii* (With, 1915). I, II  
*P. incisa* (Sars, 1905). I, II  
*P. malayensis* Sewell, 1929. III  
*P. mexicana* Park, 1994. IV  
*P. sarsi* (Farran, 1908). I, II  
*P. scopaeorhina* Park, 1994. III, IV  
*P. scotti* (Farran, 1908). I, II  
*P. sesquipedalis* Park, 1994. III, IV  
*P. tonsa* (Giesbrecht, 1895). III  
*P. triloba* Park, 1994. IV  
*P. vorax* (Grice & Hulsemann, 1968). I, II  
*Valdiviella brevicornis* Sars, 1905. II, III  
*V. oligarthra* Steuer, 1904. I

#### Family Heterorhabdidae Sars, 1903

*Hemirhabdus latus* Sars, 1905. I  
*Heterorhabdus clausi* (Giesbrecht, 1888). IV

*H. papilliger* (Claus, 1863). I, II, III, IV  
*H. spinifrons* (Claus, 1863). I, II  
*H. tanneri* (Giesbrecht, 1895). III  
*Heterostylites longicornis* (Giesbrecht, 1889). I,  
 II, IV

#### Family Lucicutiidae Sars, 1903

*Lucicutia atlantica* Wolfenden, 1904. I  
*L. clausi* (Giesbrecht, 1889). I, II  
*L. flavicornis* (Claus, 1863). I, II, III  
*L. formosa* Hulsemann, 1966. I  
*L. gaussae* Grice, 1963. I  
*L. gemina* (Farran, 1926). III  
*L. grandis* (Giesbrecht, 1895). III  
*L. magna* Wolfenden, 1904. I  
*L. maxima* Steuer, 1904. I  
*L. ovalis* (Giesbrecht, 1895). I  
*L. pacifica* Brodsky, 1950. III

#### Family Megacalanidae Wolfenden, 1904

*Megacalanus princeps* Wolfenden, 1904. I, II

#### Family Metridinidae Sars, 1902

*Gaussia princeps* (Scott, 1894). III  
*Metridia brevicauda* Giesbrecht, 1889. I, II,  
 III  
*M. curticauda* Giesbrecht, 1889. III, IV  
*M. pacifica* Brodsky, 1950. III  
*M. princeps* Giesbrecht, 1889. I, III  
*Pleuromamma abdominalis* Lubbock, 1856. I,  
 II, III, IV  
*P. borealis* (Dahl, 1893). III  
*P. gracilis* (Claus, 1863). I, II, III, IV  
*P. piseki* Farran, 1929. I, II  
*P. quadrangulata* (Dahl, 1893). III  
*P. xiphias* (Giesbrecht, 1889). I, II

#### Family Paracalanidae Giesbrecht, 1892

*Acrocalanus andersoni* Bowman, 1958. I, IV  
*A. gracilis* Giesbrecht, 1888. IV  
*A. inermis* Sewell, 1912. III, IV  
*A. longicornis* Giesbrecht, 1888. I, II, III  
*A. monachus* Giesbrecht, 1888. III, IV  
*Paracalanus aculeatus* Giesbrecht, 1888. I, II,  
 III, IV  
*P. denudatus* Sewell, 1929. I, IV  
*P. indicus* Wolfenden, 1904. II

*P. nanus* Sars, 1907. I  
*P. parvus* s.l. (Claus, 1863). III, IV  
*P. quasimodo* Bowman, 1971. I, II  
*Parvocalanus crassirostris* (Dahl, 1894). II

#### Family Phaennidae Sars, 1903

*Cephalophanes tectus* (Esterly, 1911). I, II,  
 III  
*Cornucalanus indicus* Sewell, 1929. I  
*Phaenna spinifera* Claus, 1863. I, II, III  
*Xanthocalanus agilis* Giesbrecht, 1892. I, II  
*X. paululus* Park, 1970. I, II

#### Family Pontellidae Dana, 1852

*Anomalocera ornata* Sutcliffe, 1949. I  
*Calanopia americana* Dahl, 1894. I, II  
*Labidocera acuta* (Dana, 1849). III, IV  
*L. acutifrons* (Dana, 1852). I, II, III, IV  
*L. aestiva* Wheeler, 1901. I, II  
*L. detrunccata* (Dana, 1849). III, IV  
*L. diandra* Fleminger, 1967. III, IV  
*L. euchaeta* Giesbrecht, 1888. III  
*L. johnsoni* Fleminger, 1964. III, IV  
*L. jollae* Esterly, 1906. III, IV  
*L. kolpos* Fleminger, 1967. IV  
*L. lubbocki* Giesbrecht, 1889. IV  
*L. minuta* Giesbrecht, 1889. III, IV  
*L. mirabilis* Fleminger, 1957. I, II  
*L. nerii* (Krøyer, 1849). I, II, III  
*L. scotti* Giesbrecht, 1897. I, II  
*L. trispinosa* Esterly, 1905. III, IV  
*L. wilsoni* Fleminger & Engchow, 1966. II  
*Pontella agassizi* Giesbrecht, 1895. III, IV  
*P. armata* Dana, 1849. III  
*P. atlantica* (Milne-Edwards, 1840). I, II  
*P. fera* Dana, 1849. III  
*P. lobiancoi* (Canu, 1888). I  
*P. meadi* Wheeler, 1901. I, II  
*P. mimocerami* Fleminger, 1956. I, II  
*P. polydactyla* Fleminger, 1956. I  
*P. securifer* Brady, 1883. I, III  
*P. spinicauda* Mori, 1937. III  
*P. spinipes* Giesbrecht, 1889. III, IV  
*Pontellina plumata* (Dana, 1849). I, II, III,  
 IV

*P. platychela* Fleminger & Hulsemann, 1974. I  
*P. sobrina* Fleminger & Hulsemann, 1974. III, IV  
*Pontellopsis* sp. Brady, 1883. IV  
*P. brevis* (Giesbrecht, 1889). I, II  
*P. lubbocki* Giesbrecht, 1889. III, IV  
*P. occidentalis* Esterly, 1906. III, IV  
*P. perspicax* Dana, 1852. I, II  
*P. regalis* Dana, 1852. I, III, IV  
*P. tenuicauda* Giesbrecht, 1892. III  
*P. villosa* Brady, 1883. III  
*P. yamadae* Mori, 1937. III

#### Family Pseudocalanidae Boeck, 1872

*Pseudocalanus elongatus* (Boeck, 1865). IV

#### Family Pseudodiaptomidae Herrick, 1884

*Pseudodiaptomus acutus* (Dahl, 1894). II  
*P. coheri* González & Bowman, 1965. II  
*P. culebrensis* Marsh, 1913. III, IV  
*P. euryhalinus* Johnson, 1939. III, IV  
*P. marshi* Wright, 1936. II  
*P. pelagicus* Herrick, 1884. I  
*P. wrighti* Johnson, 1964. IV

#### Family Scolecithricidae Giesbrecht, 1892

*Amallothrix gracilis* Sars, 1905. I  
*Lophothrix frontalis* Giesbrecht, 1895. I, II  
*L. latipes* Scott, 1894. I, II  
*Scaphocalanus curtus* (Farran, 1926). IV  
*S. echinatus* (Farran, 1905). I, IV  
*S. magnus* (Scott, 1909). III  
*Scolecithrix bradyi* Giesbrecht, 1888. I, II, III, IV  
*S. danae* (Lubbock, 1856). I, II, III, IV  
*S. elephas* Esterly, 1913. III  
*S. longirostris* Esterly, 1913. III  
*S. mollis* Esterly, 1913. III  
*S. obscura* Esterly, 1913. III  
*S. pacifica* Esterly, 1905. III  
*Scolecithricella abyssalis* (Giesbrecht, 1892). III, IV  
*S. ctenopus* (Giesbrecht, 1888). III, IV  
*S. dentata* (Giesbrecht, 1892). I, II  
*S. emarginata* (Farran, 1905). IV  
*S. lobophora* Park, 1970. I  
*S. marginata* (Giesbrecht, 1888). III  
*S. nicobarica* Sewell, 1929. III, IV  
*S. pseudoarcuata* Park, 1970. I

*S. tenuiserrata* Giesbrecht, 1892. I, III  
*S. vittata* (Giesbrecht, 1892). I  
*Scottocalanus australis* Farran, 1936. I  
*S. bachusi* Grice, 1969. I  
*S. corystes* Owre & Foyo, 1967. I, II  
*S. helenae* Lubbock, 1856. I, II  
*S. persecans* Giesbrecht, 1895. I, II  
*S. securifrons* (Scott, 1912). I, II  
*S. thomasi* Scott, 1909. I, II

#### Family Spinocalanidae Vervoort, 1951

*Isaacsicalanus paucisetus* Fleminger, 1983. IV  
*Mimocalanus crassus* Park, 1970. I  
*M. heronae* Damkaer, 1975. III?  
*Spinocalanus abyssalis* (Giesbrecht, 1888). III

#### Family Stephidae Sars, 1902

*Stephos deichmannae* Fleminger, 1956. I

#### Family Temoridae Giesbrecht, 1892

*Eurytemora affinis* (Poppe, 1880). I, III, IV  
*E. hirundoides* (Nordquist, 1888). I, IV  
*Temora discaudata* Giesbrecht, 1889. III, IV  
*T. stylifera* (Dana, 1852). I, II  
*T. turbinata* (Dana, 1852). I, II, III, IV  
*Temoropia mayumbaensis* Scott, 1894. I, II, IV

#### Family Tharybidae Sars, 1902

*Parundinella manícula* Fleminger, 1956. I  
*P. spinodenticulata* Fleminger, 1956. I

#### Family Tortanidae Sars, 1902

*Tortanus angularis* Ohtsuka, 1992. II  
*T. setacaudatus* Williams, 1906. I

### Superorder Podoplea

#### Order Cyclopoida Burmeister, 1843

#### Family Oithonidae Dana, 1853

*Oithona alvarezi* Lindberg, 1955. III  
*O. atlantica* Farran, 1908. I, II  
*O. attenuata* Farran, 1913. III  
*O. brevicornis* Giesbrecht, 1891. I  
*O. decipiens* Farran, 1913. III  
*O. fallax* Farran, 1913. III  
*O. fonsecae* Ferrari & Bowman, 1980. I  
*O. hebes* Giesbrecht, 1891. I  
*O. nana* Giesbrecht, 1892. I, II, III, IV

- O. oculata* Farran, 1913. I, II  
*O. oswaldocruzi* Oliveira, 1945. I, II  
*O. plumifera* Baird, 1843. I, II, III, IV  
*O. rigida* Giesbrecht, 1896. III  
*O. robusta* Giesbrecht, 1891. I, II, III, IV  
*O. setigera* (Dana, 1849). I, II, III, IV  
*O. similis* Claus, 1866. III  
*O. simplex* Farran, 1913. I, II  
*O. tenuis* Rosendorn, 1917. III  
*Paroithona parvula* Farran, 1908. III

#### **Family Thaumatosyllidae Sars, 1913**

- Caribeosyllus chawayi* Suárez-Morales, 1998. II

#### **Order Monstrilloidea Sars, 1901**

##### **Family Monstrillidae Dana, 1849**

- Cymbasoma bowmani* Suárez-Morales & Gasca, 1997. II  
*C. boxshalli* (Suárez-Morales, 1993c). II  
*C. quintanarooensis* (Suárez-Morales, 1994). II  
*C. chelemense* Suárez-Morales & Escamilla, 1997. I  
*Monstrilla barbata* Suárez-Morales & Gasca, 1992. II  
*M. bitumida* Suárez-Morales & Palomares-García, 1995. IV  
*M. elongata* Suárez-Morales, 1994. II  
*M. mariaeugeniae* Suárez-Morales & Islas-Landeros, 1993. II  
*M. reidae* Suárez-Morales, 1993a. II  
*M. rebis* Suárez-Morales, 1993b. II  
*M. spinosa* Park, 1967. III  
*Monstrillopsis cigroi* Suárez-Morales, 1993b. II

#### **Order Poecilostomatoida**

##### **Family Clausidiidae Embleton, 1901**

- Hyphalion captans* Humes, 1987. IV  
*Sapphireella tropica* Wolfenden, 1906. II, III

##### **Family Corycaeidae Dana, 1849**

- Corycaeus affinis* McMurrich, 1916. III  
*C. amazonicus* Dahl, 1894. II  
*C. anglicus* Lubbock, 1857. IV  
*C. brehmi* Steuer, 1910. III, IV  
*C. catus* Dahl, 1894. I, II  
*C. clausi* Dahl, 1894. I, IV  
*C. crassiusculus* Dana, 1849. III, IV

- C. dubius* Farran, 1911. III, IV  
*C. flaccus* Giesbrecht, 1891. I, II, III, IV  
*C. furcifer* Claus, 1863. I, II  
*C. japonicus* Mori, 1937. III, IV  
*C. latus* Dana, 1849. I, II, III, IV  
*C. lautus* Dana, 1849. I, II, III, IV  
*C. limbatus* Brady, 1883. I, II  
*C. longistylis* Dana, 1849. III  
*C. obtusus* Dana, 1849. IV  
*C. ovalis* Claus, 1863. IV  
*C. pacificus* Dahl, 1894. III  
*C. robustus* Giesbrecht, 1891. III  
*C. speciosus* Dana, 1849. I, II, III, IV  
*C. subulatus* Herrick, 1887. II  
*C. trukicus* Mori, 1937. IV  
*C. typicus* (Krøyer, 1849). I, II  
*Farranula carinata* (Giesbrecht, 1891). I, II  
*F. gibbula* (Giesbrecht, 1891). III  
*F. gracilis* (Dana, 1849). I, II  
*F. rostrata* (Claus, 1863). I, II, IV

##### **Family Erebonasteridae Humes, 1987**

- Erebonaster protentipes* Humes, 1987. IV  
*Laitmatobius crinitus* Humes, 1987. IV

##### **Family Lichomolgidae Kossman, 1877**

- Macrochiron sargassi* Sars, 1916. II

##### **Family Oncaeidae Giesbrecht, 1892**

- Lubbockia aculeata* Giesbrecht, 1891. I, III  
*L. squillimana* Claus, 1863. I, II, III  
*Oncaea conifera* Giesbrecht, 1891. I, II, IV  
*O. media* Giesbrecht, 1891. I, II, IV  
*O. media* f. *major* Sewell, 1947. I  
*O. mediterranea* (Claus, 1863). I, II,  
*O. minuta* Giesbrecht, 1892. IV  
*O. ornata* Giesbrecht, 1891. I, II  
*O. notopus* Giesbrecht, 1891. I, II  
*O. praeclara* Humes, 1988. IV  
*O. venusta* Philippi, 1843. I, II, IV  
*Pachos punctatum* (Claus, 1863). I, II, III  
*P. dentatum* (Mori, 1932). III

##### **Family Sapphirinidae Thorell, 1859**

- Copilia mirabilis* Dana, 1849. I, II, III, IV  
*C. quadrata* Dana, 1849. I, II, III, IV  
*C. vitrea* (Haeckel, 1864). I, II, III

*C. longistylis* Mori, 1932. III  
*Sapphirina angusta* Dana, 1849. I, II, III  
*S. bicuspidata* Giesbrecht, 1891. I  
*S. auronitens* Claus, 1863. I, II  
*S. darwini* Haeckel, 1864. III  
*S. gastrica* Giesbrecht, 1891. III  
*S. gemma* Dana, 1849. IV. I, II  
*S. intestinata* Giesbrecht, 1891. I  
*S. metallina* Dana, 1849. I, II, III  
*S. nigromaculata* Claus, 1863. I, II, III, IV  
*S. opalina* Dana, 1849. I, II, III, IV  
*S. ovatolanceolata* Dana, 1849. I, II  
*S. scarlata* Giesbrecht, 1891. I  
*S. stellata* Giesbrecht, 1891. I, II

### Order Harpacticoida Sars, 1903 b

#### Family Aegisthidae Giesbrecht, 1892

*Aegisthus mucronatus* Giesbrecht, 1891. I

#### Family Ameiridae Monard, 1927

*Nitokra laingensis* Fiers, 1986. I

#### Family Canthocamptidae Sars, 1911

*Mesochra pacifica* Gómez-Noguera & Fiers, 1997. III

*M. pseudoparva* Gómez-Noguera & Fiers, 1997. III

#### Family Canuellidae Lang, 1944

*Ellucana secunda* Coull, 1971. II

#### Family Cletodidae Sars, 1911

*Actinocletodes woutersi* Fiers, 1986. I

*Enhydrosoma lacunae* Jakubisiak, 1932. I

*Triathrix goldi* Fiers, 1997. I

*Schizothrix* sp. Fiers, 1997. I

#### Family Chytemnestridae Scott, 1909

*Chytemnestra scutellata* Dana, 1848. I, II, III

*C. rostrata* (Brady, 1883). I, III

#### Family Ectinosomatidae Oloffson, 1917

*Microsetella rosea* (Dana, 1848). I, II, III, IV

*M. norvegica* (Boeck, 1846). III, IV

#### Family Laophontidae Scott, 1912

*Folioquinpes chathamensis* (Sars, 1905). I

*Laophonte cornuta* Philippi, 1840. II

*Loureirophonte majahualensis* Fiers, 1993. II

*Mexicolaophonte arganoi* Cottarelli, 1977. II

*Onychocamptus mohammed* (Blanchard & Richard, 1891). I

*Paralaophontodes echinatus* (Willey, 1931). I

#### Family Longipediidae Sars, 1911

*Longipedia americana* Wells, 1980. I

#### Family Louriniidae Sars, 1911

*Lourinia armata* (Claus, 1866). II

#### Family Metidae Philippi, 1843

*Metis holothuriae* (Edwards, 1891). II

#### Family Miraciidae Dana, 1846

*Macrosetella gracilis* (Dana, 1848). I, II, III, IV

*Miracia efferata* Dana, 1852. I, II

*M. minor* Scott, 1893. I

*Oculosetella gracilis* Dana, 1852. I

#### Family Tachidiidae Sars, 1909

*Euterpina acutifrons* Dana, 1852. I, II, III, IV

*Microarthridion varquezi* Gómez-Noguera & Fiers, 1997. III

#### Family Tegastidae Norman, 1911

*Tegastes intermedius* (Herrick, 1887). I

#### Family Tetragnipitidae Lang, 1944

*Diagoniceps mexicana* Fiers, 1995. I

*Godianiceps maya* Fiers, 1995. II

*Odaginiceps clarkae* Fiers, 1995. II

*O. xamaneki* Fiers, 1995. I

*Oniscopsis robinsoni* Chappuis & Delamare, 1956. I

*Phyllopodopsyllus yucatanensis* Fiers, 1995. I

#### Family Thalestridae Sars, 1905

*Rhynchothalestris rufocincta* (Brady, 1880). II

### Order Siphonostomatoida Thorell, 1859

#### Family Dirivultidae Humes & Dojiri, 1980

*Aphotopontius arcuatus* Humes, 1987. III

*A. baculigerus* Humes, 1987. III

*A. flexispina* Humes, 1987. III  
*A. limatulus* Humes, 1987. III  
*A. mammillatus* Humes, 1987. III, IV  
*Ceuthocetes aliger* Humes & Dojiri, 1980. III  
*C. acanthothrix* Humes, 1987. III  
*C. cristatus* Humes, 1987. III  
*C. introversus* Humes, 1987. III  
*Ecbathyron prolixicauda* Humes, 1987. III  
*Exrima singula* Humes, 1987. III  
*Nilva torifera* Humes, 1987. III  
*Rhogobius contractus* Humes, 1987. III  
*Stygiopontius appositus* Humes, 1989. III  
*S. cinctiger* Humes, 1987. III  
*S. flexus* Humes, 1987. IV

*S. hispidulus* Humes, 1987. III  
*S. lumiger* Humes, 1989. III  
*S. mucroniferus* Humes, 1987. IV  
*S. paxillifer* Humes, 1989. III  
*S. sentifer* Humes, 1987. III  
*S. verruculatus* Humes, 1987. III

**Family Pontoeciellidae** Giesbrecht, 1895  
*Pontoeciella abyssicola* Giesbrecht, 1895. I

**Family Rataniidae** Giesbrecht, 1897  
*Ratania flava* Giesbrecht, 1891. I

479 species

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